

LEGEND

- ① 254 - 2 1/4" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
- ② 254 - 1 1/4" PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN
- ③ 424 - 3/4" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE A
- ④ 424 - 1 1/4" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B
- ⑤ 448 - 1 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
- ⑥ 448 - 1 1/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-22
- ⑦ 407 - TACK COAT, 702.13
- ⑧ 407 - TACK COAT FOR INTERMEDIATE COURSE
- ⑨ SPEC - FIBER REINFORCED BITUMINOUS MEMBRANE SURFACE TREATMENT, TYPE B
- Ⓐ EXISTING COMPOSITE PAVEMENT (BRICK OR CONCRETE UNDER ASPHALT)

PAVEMENT WIDTH		
STATION		WIDTH
FROM	TO	(FEET)
2.295	2.506	54
2.506	2.825	46
2.825	3.409	37
3.409	3.789	37
3.789	3.884	36
3.884	4.010	30
4.010	4.117	36

PRECONSTRUCTION INCIDENTALS

PROJECT SPECIFICATIONS/REQUIREMENTS:

ALL WORK REQUIRED TO COMPLETE THIS IMPROVEMENT SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATIONS/REQUIREMENTS OF THE CITY OF CANTON AND THE 2008 EDITION OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS, EXCEPT AS HEREIN AMENDED. IN THE CASE OF A CONFLICT BETWEEN THE CITY OF CANTON AND THE OHIO DEPARTMENT OF TRANSPORTATION SPECIFICATIONS/REQUIREMENTS, THE CITY OF CANTON REQUIREMENTS WILL TAKE PRECEDENCE, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

THE CONTRACTOR SHALL COMPLY WITH THE CITY OF CANTON SUPPLEMENTAL SPECIFICATION 01-00 PROJECT DOCUMENTATION AND SUBMITTAL REQUIREMENTS.

ADMINISTRATIVE REQUIREMENTS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY COMPLYING WITH ALL THE ADMINISTRATIVE DUTIES HEREIN CONTAINED.

THE CONTRACTOR SHALL DESIGNATE TO THE CITY AN EMPLOYEE RESPONSIBLE FOR CORRESPONDENCE, NOTIFICATIONS, AND SUBMITTALS PERTINENT TO THE PROJECT.

PRECONSTRUCTION MEETING:

A PRECONSTRUCTION MEETING WITH THE CONTRACTOR, REPRESENTATIVES OF ALL UTILITY COMPANIES, THE CITY OF CANTON ENGINEERING DEPARTMENT AND THE CITY OF CANTON WATER DEPARTMENT IS REQUIRED FOR THIS PROJECT PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.

THE CITY ENGINEER WILL CONTACT THE CONTRACTOR TO ARRANGE A MEETING DATE. THE CITY ENGINEER WILL CONTACT THE ABOVE AGENCIES TO CONFIRM THE MEETING DATE.

PROJECT SAFETY:

THE CONTRACTOR SHALL MAINTAIN A SAFE WORKING ENVIRONMENT AT THE PROJECT SITE AT ALL TIMES. THE CONTRACTOR SHALL PROPERLY SUPPORT AND/OR MAINTAIN ALL EXCAVATIONS PER APPLICABLE SAFETY REQUIREMENTS AND COMPLY WITH ALL O.S.H.A. REGULATIONS. ADEQUATE BARRICADES, WARNING LIGHTS, SIGNS, FENCING, ETC. SHALL BE ERECTED AROUND THE CONSTRUCTION AREA DURING ALL NON-WORKING HOURS TO ALERT PERSONS OF THE POTENTIAL DANGER ASSOCIATED WITH THE AREA UNDER CONSTRUCTION AS WELL AS TO PREVENT ACCESS BY UNAUTHORIZED PERSONNEL TO THE CONSTRUCTION SITE/AREA. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE SAFETY OF THE GENERAL PUBLIC AS WELL AS ALL CONSTRUCTION PERSONNEL. PUBLIC STREETS SHALL BE KEPT CLEAN AND FREE OF DEBRIS (MUD, STONE, ETC.) AT ALL TIMES. THE CONTRACTOR SHALL ALERT ALL LOCAL EMERGENCY AGENCIES (FIRE, POLICE, AMBULANCE, ETC.) OF THE NATURE OF THE PROPOSED PROJECT PRIOR TO BEGINNING AND CONSTRUCTION ACTIVITY. ACCESS FOR EMERGENCY VEHICLES SHALL BE MAINTAINED AT ALL TIMES.

UNDERGROUND UTILITIES:

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS WERE OBTAINED BY FIELD OBSERVATIONS, FROM EXISTING RECORDS, AND/OR FROM THE OWNERS OF THE RESPECTIVE UTILITIES. THE INFORMATION AS SHOWN IS BELIEVED TO BE CORRECT; HOWEVER, THE COMPLETENESS AND ACCURACY OF THIS INFORMATION CANNOT BE GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT ALL THE VARIOUS UTILITY COMPANIES (PUBLIC AND PRIVATE) TO VERIFY THE EXISTENCE, LIMITS AND/OR LOCATION OF ANY UTILITIES WHICH MAY BE ALONG THE ROUTE OR WITHIN THE VICINITY OF THIS IMPROVEMENT.

PROJECT COMPLETION:

THE WORK EMBRACED IN THIS CONTRACT SHALL BE SUBSTANTIALLY COMPLETE 60 CALENDAR DAYS AFTER THE NOTICE PROCEED.

AN INTERIM COMPLETION DATE OF JULY 19, 2015 SHALL BE EFFECTIVE FOR WORK BETWEEN PARK DRIVE AND 12TH STREET (SLM 2.30 TO SLM 3.41). THE MINIMUM ACCEPTABLE WORK TO BE COMPLETED IN THIS SECTION BY THE INTERIM DATE INCLUDES ALL PAVING PROCEDURES, CURB RAMP INSTALLATION, TEMPORARY PAVEMENT MARKINGS, AND CASTING ADJUSTMENTS/RECONSTRUCTIONS. THE INTERIM COMPLETION DATE (JULY 19, 2010) SHALL NOT BE ADJUSTED BY WEATHER DAYS; HOWEVER, THE CONTRACTOR WILL BE GUARANTEED 30 WORKING DAYS FROM THE NOTICE TO PROCEED (NTP) TO COMPLETE THE WORK BEFORE LIQUIDATED DAMAGES ARE ASSESSED. WEATHER DAYS MAY BE APPLIED TO THE END OF THE 60 DAY COMPLETION DATE.

UTILITY NOTIFICATION:

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING OPERATIONS ON THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER, THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE, AND THE OWNERS OF ANY OTHER UTILITIES (PUBLIC AND/OR PRIVATE) THAT MAY HAVE UTILITY LINES OR FACILITIES WITHIN THE VICINITY OF THIS PROJECT BUT WHO ARE NOT MEMBERS OF THE REGISTERED UTILITY PROTECTION SERVICE. THE OWNERS OF ANY UNDERGROUND UTILITY FACILITY SHALL, WITHIN 48 HOURS AFTER NOTICE IS RECEIVED, EXCLUDING SATURDAYS, SUNDAYS AND OTHER LEGAL HOLIDAYS; STAKE, MARK OR OTHERWISE DESIGNATE THE EXISTENCE AND/OR LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING AND/OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO WORKING DAYS AHEAD OF THE PLANNED CONSTRUCTION.

OHIO UTILITIES PROTECTION SERVICE: 1-800-362-2764 (CONTACT NON-MEMBERS DIRECTLY).

THE PRIMARY UTILITIES WITHIN THE CITY OF CANTON AREA:

NATURAL GAS DIST./TRANS.
DOMINION EAST OHIO GAS
320 SPRINGSIDE DR.
AKRON, OHIO 44333
330-664-2409
ATTN: BRYAN DAYTON
RELOCATION@DOM.COM
EMERGENCY NO.
1-800-521-4400

COMMUNICATIONS CABLE
TIME WARNER CABLE
5520 WHIPPLE AVE N.W.
NORTH CANTON, OHIO 44720
330-494-9200
ext. 330-555-3003
ATTN: JUSTIN FREUDEMAN
330-492-9200 X3305553192
330-472-4449(CELL)

SANITARY AND STORM SEWER
CITY ENGINEER'S OFFICE
2436-30TH ST. N.E.
CANTON, OHIO 44705
330-489-3381
ATTN: DAN MOEGLIN

TRAFFIC INTERCONNECT
CITY ENGINEER'S OFFICE
2436-30TH ST. N.E.
CANTON, OHIO 44705
330-489-3381
ATTN: NICK LOUKAS

THE CITY ENGINEER'S OFFICE IS TO BE CONTACTED DIRECTLY FOR SANITARY AND STORM SEWER AND TRAFFIC INTERCONNECT FACILITIES LOCATION: 330-489-3381.

EXPLORATORY BORINGS:

EXPLORATORY SOIL BORING INFORMATION IS NOT THE RESPONSIBILITY OF THE CITY OF CANTON. IT IS THE CONTRACTOR RESPONSIBILITY TO REVIEW ANY AND ALL INFORMATION AVAILABLE. IF CONTRACTOR REQUESTS TO DRILL AND OR EXCAVATE WITHIN THE CITY'S R/W, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AT LEAST 3 WORKING DAYS PRIOR TO THIS WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY NOTIFICATION, AS SPECIFIED, ALL TRAFFIC CONTROL, PREMIUM BACKFILL, COMPACTION AND RESTORATION, AS NECESSARY.

CONTINGENCY QUANTITIES:

WHEN SPECIFIED ON PLANS OR SPECIFICATIONS, CONTINGENCY QUANTITIES ARE TO BE PERFORMED ONLY UNDER DIRECTION OF THE CITY ENGINEER. THE DEVELOPER/CONTRACTOR SHALL NOT ORDER ANY CONTINGENCY MATERIAL OR PERFORM ANY WORK UNTIL DIRECTED BY THE ENGINEER. THE ACTUAL WORK LOCATION AND QUANTITIES FOR SUCH ITEMS SHALL BE DOCUMENTED BY THE DEVELOPER/CONTRACTOR AND THE ENGINEER.

CONSTRUCTION INCIDENTALS

PLAN DISCREPANCIES:

ANY DISCREPANCIES FROM THE PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THAT THE APPROPRIATE ADJUSTMENTS IN ALIGNMENT AND/OR GRADE MAY BE MADE PRIOR TO THE START OF CONSTRUCTION OR THE CONTINUATION OF THE ABOVE..

FAILURE BY THE CONTRACTOR TO VERIFY AND/OR DETERMINE EXISTING INFORMATION AS INDICATED WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR ANY CHANGES NECESSARY TO COMPLETE THE WORK SPECIFIED WITHOUT ADDITIONAL COMPENSATION.

VERIFICATION OF UNDERGROUND UTILITIES:

THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE AS WELL AS THE ACTUAL LOCATION, ALIGNMENT, AND ELEVATIONS OF ALL EXISTING UTILITIES/FACILITIES WITHIN AND/OR ADJACENT TO THE GENERAL LIMITS OF THESE IMPROVEMENTS INCLUDING WATERLINES, SANITARY AND STORM SEWERS, GAS LINES, COMMUNICATION LINES/BANKS, ELECTRIC LINES, ETC. THIS MAY REQUIRE EXPLORATORY EXCAVATIONS TO BE PERFORMED BY THE CONTRACTOR FOR WHICH HE WILL NOT BE REIMBURSED. THE CONTRACTOR SHALL NOT ASSUME THAT EXISTING UTILITIES/CONDUITS WERE INSTALLED AT TYPICAL/STANDARD DEPTHS OR AT UNIFORM SLOPES/GRADES/DEPTHS BETWEEN ACCESS POINTS (CATCH BASINS, MANHOLES, JUNCTION CHAMBERS, ETC.)

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT, THE CONTRACTOR SHALL UNCOVER AND DETERMINE THE ELEVATION, SIZE. SLOPE/GRADE AND MATERIAL OF EXISTING UNDERGROUND UTILITIES/CONDUITS ALONG THE ROUTE OF CONSTRUCTION, AS SHOWN ON DRAWINGS OR MARKED AT THE TIME OF CONSTRUCTION BY THE UTILITY OWNER.

PROTECTION OF UTILITIES:

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT AND SUPPORT EXISTING UTILITIES ENCOUNTERED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS AS APPROVED BY THE OWNERS OF THE UTILITY AND THE CITY ENGINEER..

THE CONTRACTOR SHALL BE RESPONSIBLE TO CLOSELY COORDINATE THEIR WORK WITH ALL UTILITY COMPANIES. ANY POTENTIAL DELAYS WILL NOT BE THE RESPONSIBILITY OF THE CITY.

THE CONTRACTOR SHOULD EXPECT AT A MINIMUM ONE SANITARY SEWER LATERAL, ONE ROOF DRAIN, ONE WATER SERVICE, AND ONE GAS SERVICE FOR EACH LOT. ANY OF THE ABOVE UTILITIES DAMAGED DUE TO THE CONTRACTOR'S WORK SHALL BE RESTORED TO THE UTILITY OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL ADEQUATELY SUPPORT, SHORE UP, OR OTHERWISE PROTECT UNDERGROUND UTILITIES WHENEVER EXPOSED IN THE TRENCH. SUPPORTS SHALL BE EXTENDED A MINIMUM OF 12 INCHES INTO UNDISTURBED EARTH EACH SIDE OF TRENCH. CONTRACTOR SHALL BAND OR TIE UTILITY TO BRIDGING FOR ITS FULL LENGTH. WHERE BRIDGING CANNOT BE SUPPORTED BY A FIRM FOUNDATION, CONTRACTOR SHALL PROVIDE VERTICAL SUPPORT, INCLUDING ANY LATERAL BRACING NECESSARY TO PROVIDE FIRM SUPPORT.

ABOVE GROUND (AERIAL) UTILITIES, INCLUDING, BUT NOT LIMITED TO, POWER, TELEPHONE AND CABLE TELEVISION, ETC., SHALL REMAIN IN SERVICE AT ALL TIMES. ANY ANTICIPATED DISRUPTION OF SERVICE SHALL BE WITH THE FULL KNOWLEDGE OF THE UTILITY COMPANY AND REQUIRES ADVANCE NOTICE TO AFFECTED USERS. REMOVAL OF GUY WIRES AND HOLDING OF POLES SHALL BE COMPLETED AS REQUIRED TO COMPLETE THE WORK, SHALL BE AS AGREED UPON BY THE UTILITY COMPANY AND CONTRACTOR, AND SHALL BE AT THE EXPENSE OF CONTRACTOR.

MAINTENANCE OF UTILITY SERVICES:

THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN UTILITY SERVICES AT ALL TIMES.

WATER SERVICE MAY BE INTERRUPTED FOR LIMITED PERIODS (4 HOURS MAXIMUM). NO SHUT DOWN SHALL OCCUR WITHOUT WRITTEN PERMISSION OF THE CITY OF CANTON WATER DEPARTMENT. PROPERTY OWNERS AFFECTED BY APPROVED INTERRUPTED SERVICE SHALL BE NOTIFIED 48 HOURS IN ADVANCE BY THE CONTRACTOR.

STORM SEWER AND SANITARY SEWER SERVICES SHALL BE MAINTAINED WITHOUT INTERRUPTION, UNLESS APPROVED BY THE CITY ENGINEER.

IN THE EVENT THAT CONSTRUCTION DISRUPTS THE FLOW OF A SANITARY SEWER, THE CONTRACTOR SHALL IMMEDIATELY RECTIFY THE DISRUPTED SEWER BY EITHER TEMPORARILY FLUMING WITH MATERIALS ACCEPTABLE TO THE ENGINEER OR BYPASSING WITH PUMPS. COST OF MAINTAINING AND REPAIR OF SANITARY SEWERS DISTURBED BY CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE.

CONSTRUCTION NOISE:

CONSTRUCTION NOISE ASSOCIATED WITH ANY IMPROVEMENT PROJECT, SHALL BE LIMITED TO LEVELS COMMENSURABLE WITH ADJOINING LAND AND THEIR ASSOCIATED USAGE AS DETERMINED BY THE CITY ENGINEER. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, ANY POWER-OPERATED CONSTRUCTION-TYPE DEVICE SHALL NOT BE OPERATED BETWEEN THE HOURS OF 7:00 P.M. AND 7:00 A.M., UNLESS AUTHORIZED BY THE CITY ENGINEER.

CLEANUP AND DISPOSAL:

DURING WORK, KEEP ROADS CLEAN AND WORK AREAS IN AN ORDERLY CONDITION. AT THE END OF THE PROJECT, ALL STREETS AND ROADWAYS EFFECTED BY THIS PROJECT SHALL BE SWEEP.

ALL WASTE MATERIAL GENERATED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OFFSITE AT NO COST TO THE CITY.

OPEN TRENCH CONSTRUCTION AND TRENCH PROTECTION:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION /TRENCHING PRACTICES FOR THE PROPOSED IMPROVEMENT, OR AS FURTHER SHOWN ON THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR SHALL FOLLOW ALL LOCAL AND STATE REGULATION, INCLUDING FEDERAL REGULATION, PART 1926, SUB PART P FOR ALL APPLICABLE REQUIREMENTS AND RESPONSIBILITIES.

PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER OF THE PROJECT'S ASSIGNED "COMPETENT PERSON" IN OSHA EXCAVATION STANDARDS.

PROVIDE TRENCH PROTECTION USING A TRENCH BOX, WOOD SHEETING AND BRACING, OR SUCH OTHER METHOD AS DETERMINED BY CONTRACTOR TO MAINTAIN A SAFE WORKING ENVIRONMENT. ALL EXCAVATIONS SHALL COMPLY WITH APPLICABLE LAWS AND REGULATIONS (FEDERAL, STATE AND LOCAL).

FOR WOOD SHEETING AND BRACING USE SOUND LUMBER SUITABLE FOR THE PURPOSE INTENDED, AND ARRANGE SO AS TO SUPPORT THE TRENCH WALLS AND EXISTING STRUCTURES AND UTILITIES.

SHEETING AND BRACING SHALL BE REMOVED BY THE CONTRACTOR AFTER PLACING AND COMPACTING BACKFILL TO A LEVEL AT LEAST 2 FEET ABOVE THE PIPE TOP. DO NOT PULL SHEETING IN INCREMENTS EXCEEDING 3 TO 4 FEET IN ORDER TO AVOID THE DANGER OF BREAKING THE BURIED UTILITY DUE TO THE WEIGHT OF THE BACKFILL. UPON REMOVAL, IMMEDIATELY FILL AND RECOMPACT VOIDS LEFT DUE TO SUCH REMOVAL.

TRENCH CLOSING AND TEMPORARY TOPPING:

THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE NECESSARY LEVELS OF PROTECTION AND SAFEGUARDING OF ALL OPEN TRENCHES, WHEN WORK IS EITHER COMPLETED AT THE END OF THE DAY OR SUSPENDED FOR ANY OTHER REASON.

AS A MINIMUM, THE CITY REQUIRES ALL TRENCHES TO BE TOPPED WITH 4" OF ODOT 304 LIMESTONE FOR TRENCHES WITHIN EXISTING ROADWAY PAVEMENTS WHEN THE ROADWAY WILL BE OPENED TO VEHICULAR TRAFFIC PRIOR TO PAVEMENT REPLACEMENT.

THE TRENCH TOPPING MATERIAL SHALL BE ROLLED OR OTHERWISE COMPLETED AND BE FURNISHED FLUSH WITH THE EXISTING ADJOINING PAVEMENT.

DUST CONTROL:

THE CONTRACTOR SHALL FURNISH AND APPLY WATER AND CALCIUM CHLORIDE FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. SUFFICIENT QUANTITIES OF CALCIUM CHLORIDE SHALL BE STORED ON THE JOB SITE AT ALL TIMES TO BE USED FOR DUST CONTROL.

TESTING OF UTILITIES:

ALL NEWLY CONSTRUCTED WATERLINES AND SANITARY SEWERS (INCLUDING LATERALS) MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH APPLICABLE STANDARDS (AWWA, ETC.), PER THE OHIO ENVIRONMENTAL PROTECTION AGENCY AND PER THE REQUIREMENTS OF THE CITY OF CANTON CITY AND WATER ENGINEERING DEPARTMENT.

PRESERVATION OF EXISTING STRUCTURES:

THE CONTRACTOR SHALL PERFORM WORK SO AS TO NOT DISTURB, DAMAGE OR DESTROY ANY MAILBOX, PAPER BOX, TELEPHONE OR POWER POLES, SIGNS, FENCES, RETAINING WALLS, LANDSCAPING ITEMS, ETC. ANY ITEM DAMAGED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY ITEM DISTURBED OR IN CONFLICT WITH THE WORK TO BE PERFORMED SHALL BE REMOVED AND RESET AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS.

OFFICE OF THE CITY ENGINEER CANTON, OHIO DANIEL J. MOEGLIN, P.E., CITY ENGINEER 2436 30th STREET N.E. 44705 (330)489-3381		GENERAL NOTES FULTON RD. NW PAVING PROJECT		REVISIONS	DESCRIPTION	DRAWN BY: NUL	DATE: 8/15/08
BY	DATE	APPROVED BY:	H. SCALE: N/A	FIELD BOOK:	V. SCALE: N/A	FILE NAME: GENERAL NOTES 1	SHEET 3 OF 13

ROADWAY / PAVEMENT / WALK / CURB (CONTINUED)

ITEM 203 – EXCAVATION:

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE TO AN AVERAGE DEPTH OF 6" OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203, EXCAVATION. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 203, EXCAVATION 100 CU. YD.

ITEM 304 – AGGREGATE BASE:

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL AREAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 304, AGGREGATE BASE, AS PER PLAN 100 CU. YD.

ITEM 604 – SPECIAL – MISCELLANEOUS METAL:

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE, AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET CITY STANDARDS AND ITEM 611 OF THE CMS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

604, SPECIAL – MISCELLANEOUS METAL 20,000 POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTING AT THE EXPENSE OF THE CONTRACTOR.

ITEM SPECIAL – FIBER REINFORCED BITUMINOUS MEMBRANE SURFACE TREATMENT, TYPE B:

THIS ITEM SHALL BE GOVERNED BY CITY OF CANTON SUPPLEMENTAL SPECIFICATION SS-06.

CONCRETE CROSSWALKS:

CONCRETE CROSSWALKS SHALL BE INSTALLED AT LOCATIONS WHERE BRICK STREETS INTERSECT THE MAINLINE. CROSSWALKS SHALL BE CONSTRUCTED AS PER CITY OF CANTON STANDARD DRAWING #34. APPLICABLE PAY ITEMS AND QUANTITIES ARE SHOWN IN THE PLAN SUBSUMMARIES.

TRAFFIC:

EXISTING STREET NAME AND TRAFFIC CONTROL SIGNS:

WHERE WORK REQUIRES THE MOVEMENT OF EXISTING SIGNS (STOP SIGNS, SPEED LIMIT SIGNS, NO PARKING SIGNS, ETC.). THE CONTRACTOR IS REQUIRED TO MAINTAIN THE FUNCTION OF ALL TRAFFIC CONTROL SIGNS. ALL SIGNS REMOVED BY THE CONTRACTOR SHALL BE STORED ON SITE AND REINSTALLED BY THE CONTRACTOR.

VEHICLE DETECTION

EXISTING LOOP DETECTORS WILL BE DESTROYED DURING CONSTRUCTION OPERATIONS. LOOPS DETECTORS WILL BE REPLACED WITH VIDEO DETECTION UNITS AS DESCRIBED BELOW.

ITEM 816 – VIDEO DETECTION SYSTEM, AS PER PLAN

THIS ITEM OF WORK SHALL MEET STATE OF OHIO DEPARTMENT OF TRANSPORTATION (ODOT) SUPPLEMENTAL SPECIFICATION 816, VIDEO DETECTION SYSTEM. IN ADDITION TO THE REQUIREMENTS OF ODOT'S SUPPLEMENTAL SPECIFICATION 907 THE FOLLOWING REQUIREMENTS SHALL ALSO APPLY:

THE THERMAL TRAFFIC SENSOR AND DETECTION MODULE MUST BE INTEGRATED IN ONE HOUSING WITHOUT THE NEED FOR ANY ADDITIONAL DETECTION SOFTWARE OUTSIDE OF THIS HOUSING. BY USING ONE OR MORE PREDEFINED DETECTION ZONES, THE DETECTION SOFTWARE WILL HAVE THE ABILITY TO DETECT VEHICLES AND BICYCLES ON MULTIPLE LANES. BICYCLE DETECTION ZONES WILL BE SEPARATE FROM VEHICLE DETECTION ZONES AND WILL UTILIZE A DIFFERENT SET OF DETECTION ALGORITHMS.

THE THERMAL IMAGING SENSOR SHALL BE FLIR ITS TRAFISENSE, BOSCH MODEL VOT-320 THERMAL IP, OR WTI MODEL C-MAX THERMAL SERIES 320.

THE DETECTION SOFTWARE WILL HAVE THE ABILITY TO DIFFERENTIATE BETWEEN VEHICLES AND BICYCLES WITH A HIGH LEVEL OF ACCURACY AND ALLOW FOR SEPARATE OUTPUTS TO BE USED FOR VEHICLE PRESENCE AND BICYCLE PRESENCE.

THE DETECTION SYSTEM SHALL GENERATE SEPARATE VEHICLE AND BICYCLE PRESENCE EVENTS AND COUNTING DATA. THE GENERATED VEHICLE AND BICYCLE PRESENCE EVENTS WILL BE SENT TO A TRAFFIC SIGNAL CONTROLLER.

IT MUST BE POSSIBLE TO PUT 4 VIRTUAL BICYCLE PRESENCE DETECTION ZONES IN THE IMAGE. STORAGE OF BICYCLE COUNT INFORMATION SHALL BE POSSIBLE.

THE NECESSARY VIDEO DETECTION CAMERAS MUST PROVIDE A COMMUNICATIONS INTERFACE THAT FULLY SUPPORTS AN ETHERNET IEEE 802.3 COMPLIANT 10/100BASE T AUTO SENSING PORT FOR ADVANCED SYSTEMS COMMUNICATIONS. THE ETHERNET PORT SHALL PROVIDE AN UPSTREAM CONNECTION TO OTHER ETHERNET DEVICES IN THE CABINET. AN INDUSTRY STANDARD RJ-45 TYPE CONNECTOR SHALL BE INCLUDED THAT SUPPORTS A SIMPLE CAT5E PATCH CABLE INTERFACE.

THE THERMAL TRAFFIC SENSOR SHALL INCLUDE A 10-YEAR WARRANTY ON THE THERMAL DETECTOR.

THE VIDEO DETECTION CAMERAS SHALL ALSO HAVE THE CAPABILITIES TO DETECT BICYCLES.

ALL SOFTWARE UPGRADES NECESSARY TO MAINTAIN THE FUNCTIONALITY OF THIS ITEM IS INCLUDED IN THE COST OF THIS ITEM.

ALL CAMERAS SHALL HAVE THE CAPABILITY TO REACH 350 FEET TO DETECT SYSTEM DETECTION ZONES.

THE SUPPLIER SHALL PROVIDE VIDEO DETECTION TRAINING TO THE CITY OF CANTON WITHIN FIVE (5) DAYS OF SYSTEM ACCEPTANCE. TRAINING SHALL BE DIVIDED INTO TWO (2) COURSES, MAINTENANCE TRAINING AND OPERATION TRAINING, AND SHALL INCLUDE, BUT NOT LIMITED TO, THE SOFTWARE AND TROUBLESHOOTING. TRAINING SHALL BE CONDUCTED AT A LOCATION DESIGNATED BY THE CITY OF CANTON. TRAINING COURSES SHALL ACCOMMODATE UP TO TEN (10) PEOPLE AND SHALL CONSIST OF A MINIMUM FOUR (4) HOURS EACH. THE LENGTH OF EACH TRAINING COURSE IS AT THE DISCRETION OF THE CITY OF CANTON. THE COST FOR TRAINING SHALL BE INCIDENTAL TO THE CONTROLLER BID ITEMS (BID ITEMS 633).

PAYMENT FOR ITEM 816 – VIDEO DETECTION SYSTEM, AS PER PLAN SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH VIDEO DETECTION CAMERA IN PLACE AND FULLY OPERATIONAL AS SHOWN IN THE PLANS. ALL MATERIALS AND WORK REQUIRED TO COMPLETE THIS ITEM, INCLUDING ATTACHMENT BRACKETS, SHALL BE INCLUDED IN THE UNIT COST.

VIDEO DETECTION WILL BE INSTALLED AS DIRECTED BY THE ENGINEERING AT THE FOLLOWING INTERSECTIONS :

25TH STREET (3 UNITS)
18TH STREET (2 UNITS)
14TH STREET (2 UNITS)
10TH STREET (2 UNITS)
7TH STREET (2 UNITS)
4TH STREET (2 UNITS)
TUSCARAWAS ST. (1 UNITS)

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 816 – VIDEO DETECTION SYSTEM, AS PER PLAN
14 EACH

ALTERNATE BID ITEM

ITEM 816 – VIDEO DETECTION SYSTEM, (TRAFICON), AS PER PLAN
THIS VIDEO DETECTION SYSTEM ITEM SHALL HAVE THE SAME SPECIFICATIONS AS ITEM 633 – VIDEO DETECTION SYSTEM, AS PER PLAN EXCEPT FOR THE FOLLOWING:

1. THE DETECTION SHALL USE THE TRAFICON USA TRAFFIC VIDEO DETECTION.
2. THE VIDEO DETECTION CAMERAS SHALL BE THERMAL CAMERAS MANUFACTURED BY FLIR.

ITEM 614 – LONGITUDINAL CHANNELIZER

LONGITUDINAL CHANNELIZERS SHALL BE PROVIDED AS CALLED FOR IN THE PLANS. A LONGITUDINAL CHANNELIZER CONSISTS OF A COMBINATION OF VERTICAL COMPONENTS AND LONGITUDINAL BASE COMPONENTS, FIT TOGETHER TO CREATE A CONTINUOUS CHANNELIZING DEVICE, AS DETAILED IN PIS 2010180. USE OF TUBULAR MARKERS, AS IDENTIFIED IN THE OMUTCD, FIGURE 6F-7, SHALL NOT QUALIFY FOR USE AS A LONGITUDINAL CHANNELIZER.

THE VERTICAL COMPONENT SHALL BE EQUIPPED WITH TWO 3-INCH WIDE RETROREFLECTIVE BANDS, PLACED A MAXIMUM OF 2 INCHES FROM THE TOP, WITH A MAXIMUM OF 6 INCHES BETWEEN THE BANDS. THE LONGITUDINAL BASE COMPONENTS SHALL BE EQUIPPED WITH REFLECTORS.

THE LONGITUDINAL CHANNELIZER SHALL BE NCHRP 350 COMPLIANT.

THE COLOR OF ALL COMPONENTS SHALL BE YELLOW.

THIS CHANNELIZER IS INTENDED TO BE A PERMANENT INSTALLATION.

FOR INSTALLATION PROCEDURES, FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT FOR PROVIDING AND INSTALLING THIS CHANNELIZER WILL BE MADE AT THE UNIT PRICE PER FOOT.

ALTERNATE BID

ITEM 614 – LONGITUDINAL CHANNELIZER, (QWICK KURB)
ITEM SHALL HAVE THE SAME SPECIFICATIONS AS ITEM 614 – LONGITUDINAL CHANNELIZER, BUT SHALL BE "QWICK KURB" AS MANUFACTURED BY QWICK KURB, INC., 1916 U.S. 41 SOUTH, RUSKIN, FL 33570

POST CONSTRUCTION INCIDENTALS

RELEASE OF RETAINER/BONDS:

PRIOR TO THE RELEASE OF RETAINER/CONSTRUCTION BOND BY THE CITY OF CANTON, THE CONTRACTOR SHALL HAVE COMPLETED THE ENGINEER'S PROJECT PUNCHLIST AND SUBMIT. FINAL WAIVER OF LIEN, IN ACCORDANCE WITH CITY SS 01-00.

OFFICE OF THE CITY ENGINEER CANTON, OHIO DANIEL J. MOEGLIN, P.E., CITY ENGINEER 2458 30th STREET N.E. 44705 (330)469-3361				GENERAL NOTES FULTON RD. NW PAVING PROJECT			
DATE: 12/30/14 H. SCALE: N/A V. SCALE: N/A SHEET 5 OF 13	DRAWN BY: NJL APPROVED BY: FIELD BOOK: FILE NAME: GENERAL NOTES 3	REVISIONS		DATE	BY		

MAINTAINING TRAFFIC:

THE CONTRACTOR SHALL MAINTAIN TRAFFIC ADJACENT TO AND THROUGH THE PROJECT AS DESCRIBED BELOW AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE OHIO DEPARTMENT OF TRANSPORTATION MANUAL OF CONSTRUCTION AND MATERIALS SPECIFICATIONS ITEM 614 MAINTAINING TRAFFIC. THE CONTRACTOR SHALL FURNISH, MAINTAIN, AND REMOVE ALL SIGNS, FLAGS, FLAGMEN, WATCHMEN, BARRICADES, SIGN SUPPORTS, CONES, BARRELS, AND INCIDENTALS IN CONFORMANCE WITH THE MOST RECENT REVISIONS OF THE CURRENT EDITION OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE FOLLOWING:

PAVING OPERATIONS

1. THE CONTRACTOR MUST MAINTAIN TWO-WAY TRAFFIC ON FULTON RD. AT ALL TIMES. DURING WORKING HOURS, IF ONE LANE IN EACH DIRECTION CAN NOT BE MAINTAINED, FLAGGERS MAY BE USED. DURING NON-WORKING HOURS, A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON FULTON RD. ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT AT ALL TIMES.
2. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE-HALF HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MINIMUM SPACING OF FIFTY (50) FEET.
3. LANE RESTRICTIONS OR LANE REDUCTIONS SHALL NOT BE PERMITTED AFTER NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE THSE HOURS DURING WHICH THE CONTRACTOR HAS A FULL COMPLEMENT OF EMPLOYEES AND EQUIPMENT ACTIVELY REMOVING AND/OR PLACING MATERIALS.
4. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN, AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, AND SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.
5. ALL FULL DEPTH PAVEMENT REMOVAL AND REPLACEMENT OPERATIONS SHALL BE COMPLETED THE SAME DAY THE EXCAVATION IS MADE. IF THE CONTRACTOR CANNOT COMPLETE THE WORK, THE EXCAVATION SHALL BE BACKFILLED.
6. ONLY DURING OFF-PEAK PERIODS (I.E. ANY PERIOD OTHER THAN 6-BAM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION PHASE.
7. IN ADDITION TO THE REQUIREMENTS OF 614 WORK ZONE PAVEMENT MARKINGS (<614.11>), AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LANES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PAVEMENT PLACING OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.
8. A QUANTITY OF 50 CU. YD. OF 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS, AND OTHER LOCATIONS PRIOR TO RESURFACING, AS DIRECTED BY THE ENGINEER.
9. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.
10. ACCESS SHALL BE MAINTAINED AT ALL TIMES FOR EMERGENCY AND FIRE DEPARTMENT VEHICLES.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO LOCAL RESIDENCES AND BUSINESSES DURING CONSTRUCTION. IN THE EVENT A DRIVE ACCESS NEEDS TO BE CLOSED, THE CONTRACTOR SHALL GIVE NOTICE OF CLOSURE AND DURATION TO THE PROPERTY OWNER 24 HOURS IN ADVANCE. CONTRACTOR SHALL ARRANGE FOR ALTERNATE PARKING AND REASONABLE ACCESS FOR THOSE PROPERTY OWNERS AFFECTED BY DRIVE CLOSURES.

12. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGN HAS BEEN INCLUDED IN THE PLAN. THE QUANTITY SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING SIGNS: W8-1 [BUMP], W8-11 [UNEVEN LANES SYMBOL]. THESE QUANTITIES SHALL BE AS PER <614.04>.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAINTENANCE OF TRAFFIC ON THIS PROJECT:

PHASE 1 - PLANED SURFACE
614, WORK ZONE CENTER LINE, CLASS II, 1.86 MILE
614, WORK ZONE LANE LINE, CLASS II, 1.02 MILE
614, WORK ZONE CHANNELIZING LINE, CLASS I, 1090 FT.
614, WORK ZONE STOP LINE, CLASS I, 290 FT.
614, WORK ZONE MARKING SIGN (ALL PHASES), 16 EACH

PHASE 2 - INTERMEDIATE COURSE
614, WORK ZONE CENTER LINE, CLASS II, 1.97 MILE
614, WORK ZONE LANE LINE, CLASS II, 1.13 MILE
614, WORK ZONE CHANNELIZING LINE, CLASS I, 1245 FT.
614, WORK ZONE STOP LINE, CLASS I, 355 FT.

PHASE 3 - SURFACE COURSE
614, WORK ZONE CENTER LINE, CLASS II, 1.97 MILE
614, WORK ZONE LANE LINE, CLASS II, 1.13 MILE
614, WORK ZONE CHANNELIZING LINE, CLASS I, 1245 FT.
614, WORK ZONE STOP LINE, CLASS I, 355 FT.

TRAFFIC CONTROL INSPECTOR:

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR QUALIFIED REPRESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PARTOL CAR:

IN ADDITION TO THE REQUIREMENTS OF CMS 614 AND THE OMUTCD, A UNIFORMED LAW ENFORCEMENT OFFICER (LEO) WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC AS DIRECTED BY THE ENGINEER FOR THE FOLLOWING TASKS:

1. FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED.

LAW ENFORCEMENT OFFICERS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR, THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR PLACEMENT. THE OFFICAL PARTOL CAR SHALL BE A PUBLIC SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE SERVICES WITH:

CITY OF CANTON POLICE DEPARTMENT
221 THIRD STREET S.W.
CANTON, OHIO 44702
330-489-3111

LAW ENFORCEMENT OFFICERS WITH PATROL CAR REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR 200 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

IF THE CONTRACTOR WISHES TO UTILIZE LEO'S FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, HE MAY DO SO AT HIS OWN EXPENSE. PAYMENT FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL BE INCLUDED UNDER ITEM 614 MAINTAINING TRAFFIC.

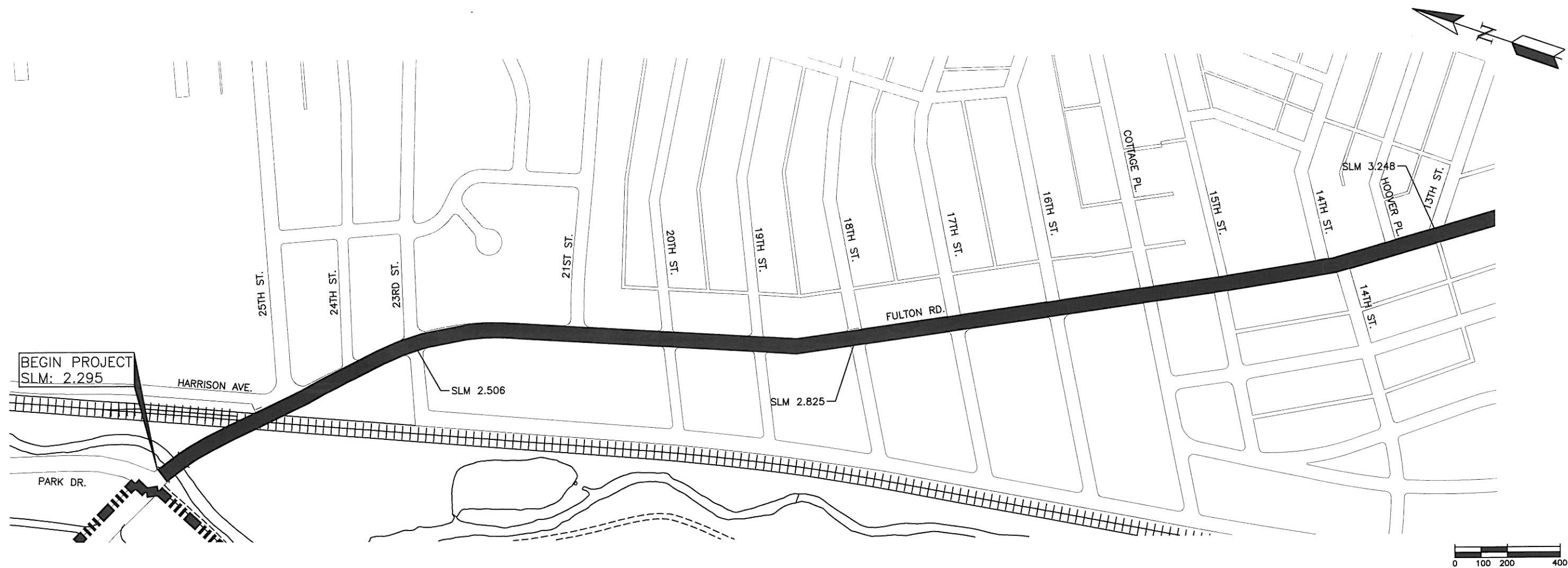
CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE:

A QUALIFIED FLAGGER SHALL BE EMPLOYED WHERE THE CONTRACTOR'S EQUIPMENT MUST MERGE WITH THE TRAFFIC STREAM. THE CONTRACTOR'S EQUIPMENT SHALL BE EQUIPPED WITH AT LEAST ONE AMBER FLASHING LIGHT. PAVERS, ROLLERS AND OTHER EQUIPMENT MAY NOT BE PARKED ON CLEVELAND AVENUE, BUT MAY BE PARKED ON SIDE STREETS, WITH THE ENGINEER'S APPROVAL, WHEN PAVING OPERATIONS ARE SCHEDULED TO CONTINUE WITHIN THE NEXT WORKDAY. OTHERWISE THE EQUIPMENT SHALL BE STORED AT A STORAGE AREA OUTSIDE THE R/W, THE LOCATION OF WHICH SHALL HAVE PRIOR APPROVAL OF THE ENGINEER. WHEN PARKING ALONG A SIDE STREET, ADEQUATE BARRICADES AND LIGHTS SHALL BE PLACED ON THE PAVEMENT SIDE OF THE EQUIPMENT TO IDENTIFY THE LIMITS OF THE EQUIPMENT. ALL OTHER EQUIPMENT, INCLUDING PRIVATE VEHICLES, SHALL BE STORAGE AT THE APPROVED CONTRACTOR'S STORAGE AREA. NO EQUIPMENT SHALL BE PARKED ON PRIVATE PROPERTY UNLESS PRIOR APPROVAL OF THE OWNER AND THE PROJECT ENGINEER HAS BEEN GRANTED.

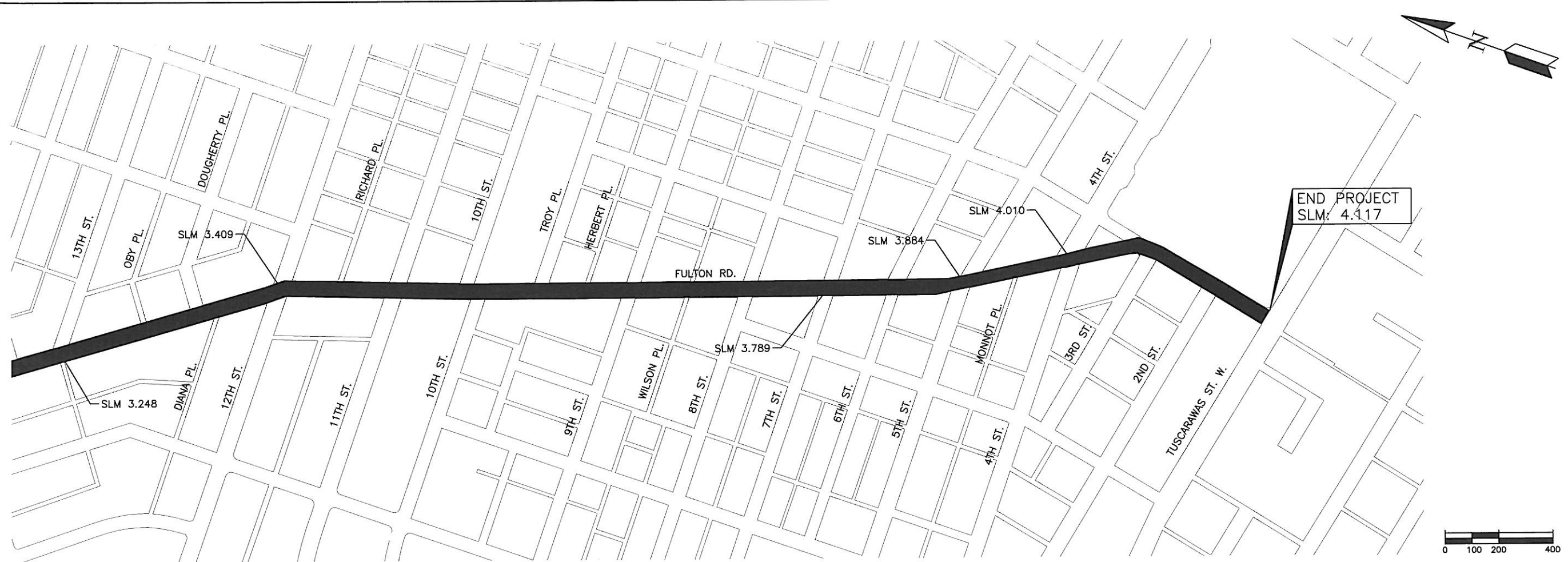
DATE: 1/13/15		DRAWN BY: NJL		REVISIONS		OFFICE OF THE CITY ENGINEER CANTON, OHIO	
H. SCALE: N/A		APPROVED BY:		DESCRIPTION		MAINTENANCE OF TRAFFIC	
V. SCALE: N/A		FIELD BOOK:				FULTON RD. NW PAVING PROJECT	
SHEET 6 OF 13		FILE NAME: MOT 1				DANIEL J. MOEGLIN, P.E.; CITY ENGINEER 2438 30th STREET N.E. 44705 (330)469-3381	

	4	5	6	8	9	13		ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
												ROADWAY	
				65	63			202	23000	128	SY	PAVEMENT REMOVED	
	500			2392	2301			202	30000	5193	SF	WALK REMOVED	
	500			278	400			202	32000	1178	FT	CURB REMOVED	
				122				202	32500	122	FT	CURB AND GUTTER REMOVED	
		100						203	30000	100	CY	EXCAVATION	
	500				25			608	12000	525	SF	5" CONCRETE WALK	
				2672	2628			608	52001	5300	SF	CURB RAMP, AS PER PLAN	4
				216	272			608	53021	488	SF	DETECTABLE WARNING, AS PER PLAN	4
	500							609	98000	500	FT	CURB MISC.: CANTON CITY STANDARD	4
				38	51			659	10000	89	SY	SEEDING AND MULCHING	
												PAVEMENT	
	2400							251	01000	2400	SY	PARTIAL DEPTH PAVEMENT REPAIR	
	2000							252	01500	2000	FT	FULL DEPTH PAVEMENT SAWING	
	500							253	01000	500	SY	PAVEMENT REPAIR	
				24917	18459			254	01001	43,376	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	4
		100		2	2			304	20001	104	CY	AGGREGATE BASE, AS PER PLAN	4
				3697	2425			407	13900	6122	GAL	TACK COAT, 702.13	
				987	738			407	14000	1725	GAL	TACK COAT FOR INTERMEDIATE COURSE	
				519	337			424	10000	856	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE A	
					79			424	10000	79	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B	
				966	674			448	46020	1640	CY	ASPHALT CONCRETE FOR INTERMEDIATE COURSE, TYPE 1, PG64-22	
				10437	0			SPEC	46020	10,437	CY	FIBER REINFORCED BITUMINOUS MEMBRANE SURFACE TREATMENT, TYPE B	5
				21	18			452	13000	39	SY	9" NON-REINFORCED CONCRETE PAVEMENT	
												SEWERS	
	20							611	98630	20	EACH	CATCH BASIN ADJUSTED TO GRADE	
	5							611	98634	5	EACH	CATCH BASIN RECONSTRUCTED TO GRADE	
	89							611	99655	89	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	4
	5							611	99660	5	EACH	MANHOLE RECONSTRUCTED TO GRADE	
		20000						611	99820	20,000	POUNDS	SPECIAL - MISCELLANEOUS METAL	5
												TRAFFIC CONTROL	
		14						816	30001	14	EACH	VIDEO DETECTION SYSTEM, AS PER PLAN	5
						1.13		644	00200	1.13	MILE	LANE LINE	
						1.97		644	00300	1.97	MILE	CENTER LINE	
						1245		644	00400	1245	FT	CHANNELIZING LINE, 6"	
						355		644	00500	355	FT	STOP LINE	
						1350		644	00600	1350	FT	CROSSWALK LINE	
						210		644	00700	210	FT	TRANSVERSE/DIAGONAL LINE	
						2		644	01000	2	EACH	RAILROAD SYMBOL MARKING	
						31		644	01300	31	EACH	LANE ARROW	
						210		614	40000	210	FT	LONGITUDINAL CHANNELIZER	5
												MAINTENANCE OF TRAFFIC	
			200					614	11100	200	hour	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
			50					614	12460	50	EACH	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			16					614	13000	16	EACH	WORK ZONE SIGN (ALL PHASES)	
			3.28					614	20400	3.28	MILE	WORK ZONE LANE LINE, CLASS II	
			5.80					614	21400	5.80	MILE	WORK ZONE CENTER LINE, CLASS II	
			3580					614	23000	3580	FT	WORK ZONE CHANNELIZING LINE, CLASS I	
			1000					614	26000	1000	FT	WORK ZONE STOP LINE, CLASS I	
												MISCELLANEOUS	
								614	11000	LUMP		MAINTAINING TRAFFIC	
								619	16010	6	MONTH	FIELD OFFICE, TYPE B	
								623	10000	LUMP		CONSTRUCTION LAYOUT STAKING	
								624	10000	LUMP		MOBILIZATION	
												ALTERNATE BIDS	
								816	30001	14	EACH	VIDEO DETECTION SYSTEM, (TRAFICON), AS PER PLAN	5
								614	40000	210	FT	LONGITUDINAL CHANNELIZER, (QWICK KURB)	5

OFFICE OF THE CITY ENGINEER CANTON, OHIO DANIEL J. MOEGLIN, P.E., CITY ENGINEER 2436 30th STREET N.E. 44705 (330)460-3361				GENERAL SUMMARY FULTON RD. NW PAVING PROJECT			
DATE: 12/30/14	DRAWN BY: N/L	REVISIONS	DESCRIPTION	DATE	BY		
H. SCALE: N/A	APPROVED BY:						
V. SCALE: N/A	FIELD BOOK:						
SHEET 7 OF 13	FILE NAME: Gen Summary						



						254	407	407	448	448	424	424	SPEC		448	305		202	202	202	202		608	608	608	452	304		659	
			DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW	PAVEMENT PLANING, ASPH. CONC., APP A/9	TACK COAT, 702.13 (0.15 GAL/SY) $\frac{0.15 \times A}{9}$	TACK COAT FOR INTER. (0.04 GAL/SY) $\frac{0.04 \times A}{9}$	ASPH. CONC. INTERM. COURSE (1 $\frac{1}{2}$ ") $\frac{1.5 \times A}{12 \times 27}$	ASPH. CONC. INTERM. COURSE (1 $\frac{1}{2}$ ") $\frac{1.25 \times A}{12 \times 27}$	FINE GRADED POLYMER A.C., TYPE A ($\frac{3}{4}$ ") $\frac{0.75 \times A}{12 \times 27}$	FINE GRADED POLYMER A.C., TYPE B (1 $\frac{1}{2}$ ") $\frac{1.25 \times A}{12 \times 27}$	FIBER REINFORCED BITUMINOUS MEMBRANE SURFACE TREATMENT, TYPE B		A.C. SURF. COURSE (2 $\frac{1}{2}$ ") (FOR CURB RAMP RESTORATION)	CONCRETE BASE (6") (FOR CURB RAMP RESTORATION)		PAVEMENT REMOVED	WALK REMOVED	CURB REMOVED	CURB AND GUTTER REMOVED		5" CONCRETE WALK	CURB RAMP, AS PER PLAN	DETECTABLE WARNING	9" NON-REINFORCED CONCRETE PAVEMENT (CROSSWALK)	AGGREGATE BASE (CROSSWALK)		SEEDING AND MULCHING	
			FT	FT	SQ FT	SQ YD	GAL	GAL	CU YD	CU YD	CU YD	CU YD	SQ YD		CU YD	SQ YD		SQ YD	SQ FT	FT	FT		SQ FT	SQ FT	SQ FT	SQ YD	CU YD		SQ YD	
2.295	TO	2.506	1114	54	60156	6684	1003	267	279		139																			
2.506	TO	2.825	1684	46	77464	8607		344		299	179		8607																	
2.825	TO	2.897	380	42	15967	1774		71		62	37		1774																	
2.897	TO	3.248	1853	37	68571	7619	1143	305	317		159																			
SUBTOTALS						24686	3671	987	596	361	514		10381																	
INTERSECTIONS																														
HARRISON AVE.					150	16.7	2.5	0.7	0.7		0.3			0.3	5.3		5.3	320	0	48		0	480	24					1.5	
25TH ST.					173	19.2	2.9	0.8	0.8		0.4			0.2	2.9		2.9	100	0	26		0	220	16					3	
24TH ST.					129	14.3	2.2	0.6	0.6		0.3			0.2	3.6		3.6	320	0	32		0	320	16					3	
23RD ST.					248	27.5	4.1	1.1	1.1		0.6			0.3	5.3		5.3	288	32	16		0	288	24					4.5	
21ST ST.					120	13.3		0.5		0.5	0.3		13.3	0.2	3.6		3.6	224	32	0		0	224	16					3	
20TH ST.					96	10.7		0.4		0.4	0.2		10.7	0.2	3.6		3.6	224	32	0		0	224	16					3	
19TH ST.					96	10.7		0.4		0.4	0.2		10.7	0.2	2.9		2.9	146	26	0		0	146	16					3	
18TH ST.					195	21.7		0.9		0.8	0.5		21.7	0	0		0	0	0	0		0	0	0					0	
17TH ST.					135	15.0	2.3	0.6	0.6		0.3			0	0		0	0	0	0		0	0	0					0	
16TH ST.					150	16.7	2.5	0.7	0.7		0.3			0	0		0	0	0	0		0	0	0					0	
COTTAGE PL.					135	15.0	2.3	0.6	0.6		0.3			0.3	5.3		5.3	288	48	0		0	288	24					4.5	
15TH ST.					60	6.7	1.0	0.3	0.3		0.1			0.2	3.6		3.6	120	32	0		0	120	16					3	
14TH ST.					180	20.0	3.0	0.8	0.8		0.4			0	0		0	0	0	0		0	0	0					0	
HOOVER PL.					60	6.7	1.0	0.3	0.3		0.1			1.5	24		24	100	32	0		0	100	16	21	2			3	
13TH ST.					150	16.7	2.5	0.7	0.7		0.3			0.3	4.9		4.9	262	44	0		0	262	32					6	
SUBTOTALS						230.9	26.3	9.4	7.2	2.1	4.6		56.4	3.9	65		65	2392	278	122		0	2672	316	21	2			37.5	
TOTALS CARRIED TO GENERAL SUMMARY						24917	3697	987	966		519	0	10437		4	65		65	2392	278	122		0	2672	216	21	2			38



						254	407	407	448	448	424	424	SPEC		448	305		202	202	202	202		608	608	608	452	304		659	
			DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW	PAVEMENT PLANING, ASPH. CONC., APP A/9	TACK COAT, 702.13 (0.15 GAL/SY) 0.15* 9	TACK COAT FOR INTER. (0.04 GAL/SY) 0.04* 9	ASPH. CONC. INTERM. COURSE (1 1/2") 1.5* 12*27	ASPH. CONC. INTERM. COURSE (1 1/4") 1.25* 12*27	FINE GRADED POLYMER A.C., TYPE A (3/4") 0.75* 12*27	FINE GRADED POLYMER A.C., TYPE B (1 1/4") 1.25* 12*27	FIBER REINFORCED BITUMINOUS MEMBRANE SURFACE TREATMENT, TYPE B		A.C. SURF. COURSE (2 1/4") (FOR CURB RAMP RESTORATION)	CONCRETE BASE (6") (FOR CURB RAMP RESTORATION)		PAVEMENT REMOVED	WALK REMOVED	CURB REMOVED	CURB AND GUTTER REMOVED		5" CONCRETE WALK	CURB RAMP, AS PER PLAN	DETECTABLE WARNING	9" NON-REINFORCED CONCRETE PAVEMENT (CROSSWALK)	AGGREGATE BASE (CROSSWALK)		SEEDING AND MULCHING	
			FT	FT	SQ FT	SQ YD	GAL	GAL	CU YD	CU YD	CU YD	CU YD	SQ YD		CU YD	SQ YD		SQ YD	SQ FT	FT	FT		SQ FT	SQ FT	SQ FT	SQ YD	CU YD		SQ YD	
3.248	TO	3.409	850	37	31450	3494	524	140	146		73																			
3.409	TO	3.789	2006	37	74222	8247	1237	330	344		172																			
3.789	TO	3.884	502	36	18072	2008	301	80	84		42																			
3.884	TO	4.010	665	30	19950	2217	333	89	92		46																			
4.010	TO	4.117	565	36	20340	2260		90			78																			
SUBTOTALS						18226	2395	729	666	0	333	78	0																	
INTERSECTIONS																														
OBY PL.					38	4.2	0.6	0.2	0.2		0.1				0.1	1.3		1.3	100	12	0		0	100	16				3	
DOUGHERTY PL.					69	7.7	1.2	0.3	0.3		0.2				0.1	1.3		1.3	100	12	0		0	100	16				3	
DIANA PL.					53	5.8	0.9	0.2	0.2		0.1				0.1	1.3		1.3	100	12	0		0	100	16				3	
12TH ST.					0	0	0	0	0		0				0	0		0	0	0	0		0	100	0				0	
RICHARD PL.					66	7.3	1.1	0.3	0.3		0.2				1.3	20		20	100	12	0		0	100	16	18	2		3	
11TH ST.					150	16.7	2.5	0.7	0.7		0.3				0.4	7.1		7.1	384	64	0		0	384	32				6	
10TH ST.					180	20.0	3.0	0.8	0.8		0.4				0	0		0	0	0	0		0	0	0				0	
TROY PL.					81	9.0	1.4	0.4	0.4		0.2				0.1	1.8		1.8	75	16	0		25	50	8				1.5	
HERBERT PL.					38	4.2	0.6	0.2	0.2		0.1				0.1	1.3		1.3	100	12	0		0	100	16				3	
9TH ST.					180	20.0	3.0	0.8	0.8		0.4				0.3	5.3		5.3	288	48	0		0	288	24				4.5	
WILSON PL.					180	20.0	3.0	0.8	0.8		0.4				0.2	2.7		2.7	200	24	0		0	200	32				6	
8TH ST.					210	23.3	3.5	0.9	1.0		0.5				0.4	7.1		7.1	384	64	0		0	384	32				6	
7TH ST.					158	17.5	2.6	0.7	0.7		0.4				0	0		0	0	0	0		0	0	0				0	
6TH ST.					180	20.0	3.0	0.8	0.8		0.4				0.4	7.1		7.1	240	64	0		0	384	32				6	
5TH ST.					165	18.3	2.8	0.7	0.6		0.4				0.3	5.3		5.3	180	48	0		0	288	24				4.5	
MONNOT PL.					38	4.2	0.6	0.2	0.2		0.1				0.1	1.3		1.3	50	12	0		0	50	8				1.5	
4TH ST.					210	23.3		0.9				0.5			0	0		0	0	0	0		0	0	0				0	
2ND ST.					105	11.7		0.5				0.2			0	0		0	0	0	0		0	0	0				0	
SUBTOTALS						233.2	29.8	9.1	8		4.2			3.9	62.9		62.9	2301	400	0			0	2628	272	18	2		51	
TOTALS CARRIED TO GENERAL SUMMARY						18459	2425	738	674		337	79	0		4	63		63	2301	400	0			25	2628	272	18	2		51

PAVEMENT MARKING LEGEND

- L

LANE LINE
- CS

CENTER LINE, DOUBLE, SOLID
- CH

CHANNELIZING LINE
- S

STOP LINE
- CW

CROSSWALK LINE
- TY

TRANSVERSE LINE, (YELLOW), 12' C/C
- TW

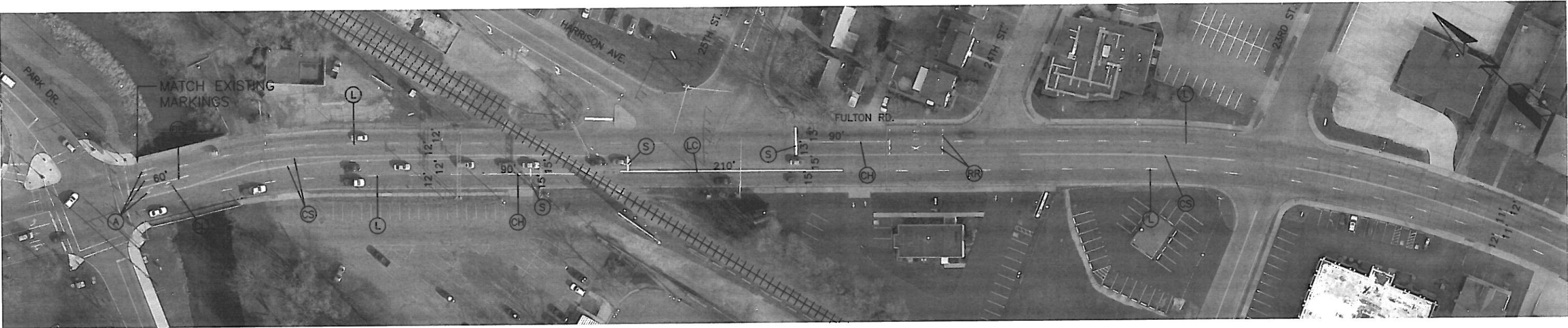
TRANSVERSE LINE, (WHITE), 12' C/C
- RR

RAILROAD SYMBOL MARKING
- SC

SCHOOL SYMBOL MARKING, 72 INCH
- A

LANE ARROW
- LC

LONGITUDINAL CHANNELIZER



DATE: 1/5/15		DRAWN BY: N/L		REVISIONS		OFFICE OF THE CITY ENGINEER CANTON, OHIO	
H. SCALE:		APPROVED BY:		DESCRIPTION		DANIEL J. MOEGLIN, P.E., CITY ENGINEER	
V. SCALE:		FIELD BOOK:				2436 30th STREET N.E. 44705 (330)489-3381	
SHEET 10 OF 13		FILE NAME: Pavement Markings 1				PAVEMENT MARKINGS FULTON RD. NW PAVING PROJECT	

PAVEMENT MARKING LEGEND

- L

LANE LINE
- CS

CENTER LINE, DOUBLE, SOLID
- CH

CHANNELIZING LINE
- S

STOP LINE
- CW

CROSSWALK LINE
- TY

TRANSVERSE LINE, (YELLOW), 12' C/C
- TW

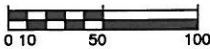
TRANSVERSE LINE, (WHITE), 12' C/C
- RR

RAILROAD SYMBOL MARKING
- SC

SCHOOL SYMBOL MARKING, 72 INCH
- A

LANE ARROW
- LC

LONGITUDINAL CHANNELIZER



OFFICE OF THE CITY ENGINEER
CANTON, OHIO
DANIEL J. MOEGLIN, P.E., CITY ENGINEER
2436 30th STREET N.E. 44705 (330)469-3381

PAVEMENT MARKINGS
FULTON RD. NW PAVING PROJECT

DATE: 1/5/15	DRAWN BY: NJL	DESCRIPTION	REVISIONS	DATE	BY
H. SCALE:	APPROVED BY:				
V. SCALE:	FIELD BOOK:				
SHEET 11 OF 13	FILE NAME: Pavement Markings 2				



PAVEMENT MARKING LEGEND

- (L)

LANE LINE
- (CS)

CENTER LINE, DOUBLE, SOLID
- (CH)

CHANNELIZING LINE
- (S)

STOP LINE
- (CW)

CROSSWALK LINE
- (TY)

TRANSVERSE LINE, (YELLOW), 12' C/C
- (TW)

TRANSVERSE LINE, (WHITE), 12' C/C
- (RR)

RAILROAD SYMBOL MARKING
- (SC)

SCHOOL SYMBOL MARKING, 72 INCH
- (A)

LANE ARROW
- (LC)

LONGITUDINAL CHANNELIZER



MATCH EXISTING
MARKINGS

INTERSECTION TO BE RECONSTRUCTED
WITH 12TH ST. PROJECT.

NOTE: CENTER THE CENTER LINE IN THIS
SECTION THE ROADWAY EXCEPT AT
INTERSECTIONS WITH LEFT TURN LANES.



NOTE: CENTER THE CENTER LINE IN THIS
SECTION THE ROADWAY EXCEPT AT
INTERSECTIONS WITH LEFT TURN LANES.

OFFICE OF THE CITY ENGINEER
CANTON, OHIO
DANIEL J. MOEGLIN, P.E., CITY ENGINEER
2436 30th STREET N.E. 44705 (330)489-3381

PAVEMENT MARKINGS
FULTON RD. NW PAVING PROJECT

DATE:	1/5/15	DRAWN BY:	NJL	REVISIONS	DATE	BY
H. SCALE:		APPROVED BY:		DESCRIPTION		
V. SCALE:		FIELD BOOK:				
SHEET	12 OF 13	FILE NAME:	Pavement Markings 3			



- | | |
|---------------------------------|---|
| (L) LANE LINE | (TY) TRANSVERSE LINE, (YELLOW), 12' C/C |
| (CS) CENTER LINE, DOUBLE, SOLID | (TW) TRANSVERSE LINE, (WHITE), 12' C/C |
| (CH) CHANNELIZING LINE | (RR) RAILROAD SYMBOL MARKING |
| (S) STOP LINE | (SC) SCHOOL SYMBOL MARKING, 72 INCH |
| (CW) CROSSWALK LINE | (A) LANE ARROW |
| | (LC) LONGITUDINAL CHANNELIZER |